

**Notice of Allowability**

Application No.

09/977,956

Examiner

A. Dexter Tugbang

Applicant(s)

ITO ET AL.

Art Unit

3729

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Application filed on 10/17/01.
2. ☒ The allowed claim(s) is/are 7-13.
3. ☒ The drawings filed on 17 October 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 10/17/01
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 10/18/04
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of the invention of Group II, Claims 7-13 in the reply filed on 6/30/04 is acknowledged. The traversal is on the ground(s) that Group I is not an intermediate product and that a search and examination can be sufficiently performed for both of the inventions of Groups I and II. This is not found persuasive because Group I is considered to be an intermediate part of laminated thin plate parts. Nowhere in Group I is the laminated thin plate parts limited to any ink jet head and thus Group I can be an intermediate part of, for example, a printed circuit board. Because the search for Group II would not be required for Group I, the searches would be divergent and non-coextensive placing a burden on the examiner to search and examine the inventions of both Groups I and II. Therefore, the requirement is still deemed proper and is therefore made FINAL.
2. Claims 1-6 and 14-20 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/30/04.

## **EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

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Authorization for this examiner's amendment was given in a telephone interview with Ms. Linda Saltiel on October 18, 2004.

The application has been amended as follows:

In the Specification

The title has been changed to --Method for Fabricating an Ink-Jet Printer Head--.

In the abstract, the term "plates" (specification, page 36, line 2) has been replaced with the phrase of --A manufacturing method manufactures plates--; and "pattern are" (line 2) has been replaced with --pattern, wherein the predetermined pattern is--.

In the Claims

Claims 1-6 and 14-20 have been cancelled.

Claim 7 has been amended as follows.

7. (Amended) A method manufacturing an ink-jet head, comprising the steps of:

forming a plurality of different type plates and a plurality of frames, each of the plurality of different type plates having an ink passage and being formed with a corresponding frame of the plurality of frames;

applying an adhesive to each one of the plurality of different type plates;

stacking each one the plurality of frames such that the ink passage of one of the plurality of different type plates communicates with the ink passage of another one of the plurality of different type plates and to laminate the plurality of different types of plates;

and

removing the laminated different types plates from the stacked frames.

In Claim 9, the phrase of “in the cutting step” (line 4) has been removed.

*Reasons for Allowance*

4. The following is an examiner’s statement of reasons for allowance: the prior art does not teach all of the limitations of the claimed invention including stacking each of the plurality of frames such that an ink passage of one of the different types of plates communicates with the ink passage of another one of the plurality of different type plates and removing the different types of plates from the stacked frames.

The following two cited references will be discussed.

Pies et al (U. S. Patent 5,235,352) teaches that it is well known to apply an adhesive to each of a plurality of plates and stack and laminate the plates with ink passages in communication with one another (see Figs. 4 and 6A). However, nowhere does Pies teach the use of any frames in which the frames are stacked such that the ink passage of on different type of plate is in communication with another one of the plurality of different type plates.

Furthermore, Pies does not teach removing the laminated different types of plates from the stacked frames.

Lin shows that it is well known in the art to stack a plurality of frames 14 with plates 16 (see Fig. 1) in which the frames are subsequently removed from the plates. However, nowhere does Lin show any ink passages in the plates because Lin does not teach an ink-jet head.

To combine the prior art above would therefore be impermissible hindsight.

Accordingly, Claims 7-13 are allowed.


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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 703-308-7599. The examiner can normally be reached on Monday - Friday 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**A. Dexter Tugbang**  
**Primary Examiner**  
**Art Unit 3729**

October 18, 2004